# ThinkStation® D20 (4155) - TopSeller (Windows 7)

| Name | Type-model | Slot x bay | Processor(s) | GHz | Cores | Memory DIMMs | Memory type | Disk(s) | Disk size | Pre-config RAID | SATA optical | Diskette or Media reader | Graphics adapter(s) | 1394 adptr | Win7 preload | Avail date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ✂ | **D20** 4155-B6U | 6x9 | 1xE5507 | 2.26 | 4 | 2x1GB | UDIMM | 1x500GB[2] SATA | 3.5" | No | DVD±RW | Media | 1xFX580 | 1394 | Pro64 | Mar 10 |
| ✂ | **D20** 4155-B7U | 6x9 | 1xE5620 | 2.40 | 4 | 2x2GB | UDIMM | 1x500GB SATA | 3.5" | No | DVD±RW | Media | 1xFX1800 | 1394 | Pro64 | Mar 10 |
| | **D20** 4155-E1U | 6x9 | 1xE5620 | 2.40 | 4 | 2x2GB | RDIMM | 1x500GB SATA | 3.5" | No | DVD±RW | Media | | | Pro64 | Sep 10 |
| | **D20** 4155-F1U | 6x9 | 1xX5650 | 2.66 | 6 | 2x2GB | UDIMM | 1x500GB SATA | 3.5" | No | DVD±RW | Media | 1x4000 | 1394 | Pro64 | Oct 10 |
| ☞ | **D20** 4155-E9U | 6x9 | 1xE5620 | 2.40 | 4 | 2x2GB | UDIMM | 1x500GB SATA | 3.5" | No | DVD±RW | Media | 1x2000 | 1394 | Pro64 | Oct 10 |
| ✂ | **D20** 4155-G1U | 6x9 | 1xE5507 | 2.26 | 4 | 2x2GB | UDIMM | 1x500GB SATA | 3.5" | No | DVD±RW | Media | 1x600 | 1394 | Pro64 | Nov 10 |

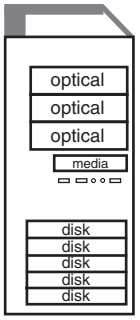
- ***These small and medium business (SMB) models are part of the US TopSeller™ Program***
- ***These models have a 3-year limited warranty[1]***
- ***These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)***

| | |
|---|---|
| Processor | Up to two processors, one processor standard,<br>**Intel® Xeon® Processor E5507** with **quad-core**,<br>4.8GT/s (giga-transfers/second) QPI (QuickPath Interconnect)<br>Intel 64, Virtualization Technology,<br>800MHz DDR3 memory controller, and 4MB cache or<br>**Intel Xeon Processor E5620** with **quad-core**,<br>5.86GT/s QPI, Intel 64, Hyper-Threading Technology,<br>Virtualization Technology, Turbo Boost Technology,<br>1066MHz DDR3 memory controller, and 12MB cache or<br>**Intel Xeon Processor X5650** with **six-core**,<br>6.4GT/s QPI, Intel 64, Hyper-Threading Technology,<br>Virtualization Technology, Turbo Boost Technology,<br>1333MHz DDR3 memory controller, and 12MB cache |
| Implementation | Two LGA1366 sockets |
| Memory | *UDIMM Model (s):* **2GB** or **4GB** std, 48GB max,<br>*RDIMM Model (s):* **4GB** std,<br>192GB max (pending 16GB RDIMM availability);<br>**PC3-10600 1333MHz DDR3****, **ECC**,<br>6-channel capable (3-channel per processor),<br>twelve 240-pin DIMM sockets***<br>** System automatically clocks down for processors with 800MHz or 1066MHz DDR3 memory controller<br>*** Over six DIMMs requires dual processors |
| Graphics | Two PCI Express® x16 adapters required for quad monitor support,<br>* Adapters >75W use auxiliary power connector(s) from PSU<br>*Some:* **NVIDIA® Quadro® FX 580**, PCIe x16 adapter, 512MB, two DisplayPort™, one dual-link DVI-I****, 40W<br>*Some:* **NVIDIA Quadro FX 1800**, PCIe x16 adapter, 768MB, two DisplayPort, one dual-link DVI-I****, 59W<br>*Some:* **NVIDIA Quadro 600**, PCIe x16 adapter, 1GB, one DisplayPort, one dual-link DVI-I, 40W<br>Some: **NVIDIA Quadro 2000**, PCIe x16 adapter, 1GB, two DisplayPort, one dual-link DVI-I****, 62W<br>*Some:* **NVIDIA Quadro 4000**, PCIe x16 adapter, 2GB, two DisplayPort, one dual-link DVI-I****, one stereo, 142W<br>**** Only two display connectors are active at a time |
| Diskette drive | None (use USB port) |
| Media reader | 20-in-1 media reader, internal USB 2.0 |
| SATA disk(s) | **500GB**, SATA 3.0Gb/s, 7200 rpm, 3.5" |
| SAS disk(s) | None |
| SATA DVD±RW | Super Multi-Burner DL DVD±RW, SATA 1.5Gb/s |
| Disk Controller | 3 SATA connectors for opticals, SATA 3.0Gb/s, integrated in ICH10;<br>5 SATA/SAS[4] connectors for disks, SATA 3.0Gb/s, SAS 3.0Gb/s,<br>RAID[8] 0, 1, 5, 10, integrated in Marvell® 88SE6480 |
| Chipset | **Intel 5520 Chipset**,<br>Intel ICH10, Winbond® W83627DHG-P Super I/O |
| Front ports | Two USB 2.0, microphone (3.5mm), headphone (3.5mm),<br>FireWire 400 (IEEE 1394a) |
| Rear ports | Eight USB 2.0, eSATA, serial (9-pin), two ethernet (RJ-45),<br>FireWire 400 (IEEE 1394a),<br>six analog audio ports (line-in, mic-in, front-out,<br>rear-out, center/sub-out, side out), Optical SPDIF digital out,<br>Optical SPDIF digital in |
| IEEE 1394 adptr | *Some:* FireWire PCI adapter, 1394a-2000, 400Mbps, two 6-pin ports on rear |
| Audio | High Definition (HD) Audio, Analog Devices AD1988A codec |
| Speaker | Internal speaker for business audio |
| Ethernet | Dual gigabit ethernet on planar, Broadcom® BCM5755 and BCM5754 |
| Security chip | Broadcom Trusted Platform Module, TCG 1.2-compliant |
| Keyboard | Preferred Pro USB Keyboard (USB connector), 104-key, black |
| Mouse | Optical Wheel Mouse (USB connector), black |
| Power supply | 1060 watts with 120mm bottom-mounted variable speed fan, universal,<br>Climate Savers® Computing Bronze, 80 PLUS® Bronze qualified |
| Cooling | Five fans (power supply, first processor, second processor, rear, front disk) |
| Rack mount | Rack shelf support or optional sliding rack mount rail kit support |

**Preloaded operating system[20]**
- Genuine Windows® 7 Professional 64

**Tower**

- Raven black color; metal case
- 8.3"W x 23.7"D x 19.1"H (with handle)
- 210mm W x 602mm D x 485mm H
- 60 lb (27.1kg) max configuration
- 55-liter
- Removable handle on top front
- Toolless side cover removal
- Toolless disk and optical drive removal
- Toolless adapter retention
- Illuminated front icons
- Rack shelf support or optional rail kit

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|---|---|---|---|
| Bay ① | 5.25", | 1.6" high, | external, std optical |
| Bay ② | 5.25", | 1.6" high, | external, open |
| Bay ③ | 5.25", | 1.6" high, | external, open |
| Bay ④ | 3.5", | 1" high, | external, std media reader |
| Bay ⑤ | 3.5", | 1" high, | internal, std disk |
| Bay ⑥ | 3.5", | 1" high, | internal, opt disk |
| Bay ⑦ | 3.5", | 1" high, | internal, opt disk |
| Bay ⑧ | 3.5", | 1" high, | internal, opt disk |
| Bay ⑨ | 3.5", | 1" high, | internal, opt disk |

Slot 1: half-length, full-height, PCIe x1
Slot 2: full-length, full-height, PCIe 2.0 x16 (75W* max)
Slot 3: full-length, full-height, 32-bit PCI 2.3
Slot 4: full-length, full-height, PCIe 2.0 x16 (75W* max)
Slot 5: full-length, full-height, PCIe x4 (x16 mechanical)
Slot 6: half-length, full-height, 32-bit PCI 2.3

**SECURITY**

- Security chip (see information on left)
- Side cover lock (ships with two identical keys)
- Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)
- Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)
- Power-on password
- Administrator password
- Boot sequence control
- Boot without keyboard, mouse, diskette
- Serial port I/O control
- USB port disablement (front or all)

Supports ThinkVantage® technologies

GREENGUARD® certified
RoHS-compliant
EPEAT™ Gold rating

**LIMITED WARRANTY[1]**

- **3-year parts and labor**
- **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- **ThinkPlus™ services available; see http://lenovo.com/thinkplus/warranty**
  - **Onsite service upgrade options (in eligible locations)[7]**
  - **Post warranty maintenance services**
- **24 hour x 7 day[14] toll-free support during the warranty period[1] via 800-426-7378**

See footnotes for important warranty information

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☞ US models announced October 26 or November 2, 2010; previous models on March 16, September 21, or October 12, 2010



✂ US models withdrawn effective February or May 2011